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SOME EFFECTS
OF THE
CLIMATE OF ITALY.

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OF THE
CLIMATE OF ITALY

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P R E F A C E.

THIS small volume contains the substance of a short course of lectures, written during the leisure of an involuntary holiday, delivered a few weeks since in the theatre of St. Mary's Hospital, and reported in the 'Lancet.' I rejoice in the opportunity which publication affords of thus again acknowledging my debt of gratitude for the sweet influences of Italian skies, by revising the whole and making it somewhat easier reading. To this end I have broken up the lectures and re-arranged them into subjects, filling up gaps with a little fresh matter.

T. K. C.

22B, BROOK STREET, GROSVENOR SQUARE;
November, 1865.

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ON SOME EFFECTS
OF THE
CLIMATE OF ITALY.

PART I.
PERSONAL EXPERIENCE.

IT is now nearly a year and a half since I was obliged to have a thigh amputated on account of the degeneration and rupture of the popliteal artery. In the eighth month after the operation I tried to resume a moderate amount of practice, but found myself quite knocked up by it. My circulation was so weak, and the renewal of the body evidently so tardy and unequal to calls made upon it, that my kind professional friends became anxious; and they urged me to free myself from the physical and mental labour of London life for about a twelvemonth. They recom-

mended me to travel, with the idea of keeping me out of the temptation to transgress their orders which the near view of work to be done offers to a working man. Like a well-behaved patient, without questioning the why or wherefore, I put my house in order and set off. It was early in last winter ; and partly by accident and partly with an intention to renew the feelings of youth by visiting scenes hallowed in school and college memories, I gradually got to Italy, and spent most of my time there. And now I receive the reward of my obedience in meeting again, sooner than I had even hoped, my old pupils and friends in St. Mary's lecture room, with restored health and strength, and by God's blessing enabled to engage actively in the duties of my profession.

It may readily be guessed that I fell in with not a few of my countrymen wandering, as I was, in compliance with medical prescription, and a good many stationed in what may be called 'health-resorts.' Conversation with them and the natural direction of my thoughts to my own case led me to reflect much on the subject of

travelling for health ; and it struck me that the ideas of both patients and medical men about it are governed much by accident or individual fancy, and fluctuating with fashion more than is seemly in a scientific age.

Invalids are often imprisoned in some spot which happens to have been brought prominently before the world by a well-written pamphlet, when a frequent change of air would have been beneficial to them physically, and when the moral effect of change of scene would have been still more useful. On the other hand, those who require calm rest are allowed to rush wildly along through a tour as an *opus operatum*, and pass the greater part of their time in railway trains and travelling carriages.

I noticed that, except in selecting places of even temperature for cases of pulmonary phthisis, both patients and their advisers seemed more impressed with the value of some bath or spa, whose physical contents and effects are often quite inappreciable, than with the effect of the whole change of air, water, place, and scene, which the use of that bath or spa involves. Even if they acknow-

ledged the general wholesomeness of travelling, they were evidently not convinced of any advantages to be derived in special cases from special climates. Apparently they feel too strongly the vagueness and small extent of our knowledge of the action of climatic influences on the human body to be dogmatic in their application of physiological science to cure disease by their means.

Yet can we suppose these cosmic powers null? Shall we not rather look upon them as the most active agents that we have for the restoration of health? Shall we not try to remedy the ignorance which makes our use of these agents unsatisfactory, and look forward to physical research into natural phenomena as the chief hope for the future of medicine?

Physiological induction not aiding, the next best guide to the right use of a remedy is observation conducted on a large scale by the collection of independently recorded facts. One might in this way have a fair means of judging what morbid changes promoted by one climate are likely to be counteracted by another. But above all things it is necessary that these facts should not be col-

lected in the spirit of an advocate, to praise or to condemn ; they must be recorded without a purpose. Upon such body of evidence, however, I could not find that any of the opinions about climate, especially the climate of Italy, rested.

I observed this when thinking about my own case, before I started. And my first idea was to try and remedy the ignorance which I could not but confess by a recourse to the stores of our medical literature. "I am thinking of travelling in Italy, Mr. Librarian, and I want some book to tell me whether the climate in general will suit my state of health, and whether one part is better than another." "We have many local works, sir, about various parts of the country." "Very good, I dare say, but monotonous. Each one that has any mineral waters declares those particular waters to be useful in almost every disease under the sun ; and if they have not any mineral waters, that the temperature is very even during the winter, and more suitable for phthisical patients than Florence or Naples (which it may *very* easily be). Then the bigger monographs give a list of the indigenous plants, with a history of the

place from the time of the Romans, and the smaller ones do not—and there's an end. The more comprehensive works are still less satisfactory, for they merely inform you that the climate has its advocates and opponents, whose opinions they repeat, and leave you with a table of mean temperatures suspended in a fluctuating balance of opinions. I want something more than the ideas of the 'oldest inhabitants.' Have you any statistics to show what forms of disease are prevalent or fatal, and what are rare and not fatal?" "No, sir; the works published do not give any. You must trust to opinions, for it seems impossible to get facts about Italy." "Impossible! is it? Well, we shall see."

So it was with some misgivings and with the feeling that I was an experimental traveller, that I set foot on the Mediterranean shores. I could not see that I had any of the complaints for which various spas and baths are recommended in various treatises. I had no tubercles in the lungs, no instinctive desire for the even temperature promised in the sheltered nooks appropriated to the phthisical. I had no clearly defined organic

change in any viscus, or any of the ailments classified by the nosologists with names ending in “—itis.” Nobody could point to a part diseased, yet I was very weak and ill. The history and the symptoms seemed to indicate tendency to slowness of repair, a proneness to dilapidation which had already resulted in the destruction of one part, and might at any time ruin others.

I was, in short, a convalescent who did not continue to convalesce. This was an anxious position ; for we all know that in health, as in morals, standing still is very rare, and that not advancing is usually synonymous with falling back. I was in a state which one knows by experience may beget almost any organic change, though as yet none ; a result of which the “may” or “may not” is a question of slow death or of renewed life.

But I must not abuse the lecturer’s chair by turning it into an opportunity for egotism, as if there was anything peculiarly instructive or original in my own case. The condition is unfortunately common enough, and shows itself locally in a great variety of parts and in a great external variety of forms, which, when complete, are de-

scribed in books of pathological anatomy as degenerations of those parts ; that is to say, where the normal tissue is replaced by a less vitalized one—a lower kind of animal matter, retaining the same shape as the healthy organ. It is scarcely needful to specify Bright's kidneys, pale and thin hearts, paralytic muscles, white-softened brains, as familiar instances.

Doubtless, this change may originate in a single organ ; but more often, perhaps, than has been suspected, begins by affecting the whole constitution in a way which receives shrewder notice from the observation of those near and dear to the patient than from the cold science of the physician. The mind of the medical attendant recurs naturally to his post-mortem examinations ; it is directed to the degree of alteration in some organ which his diagnosis enables him to fix upon ; and he names the ailment accordingly, thickening of the bronchi, cirrhosis of the liver, enlargement of the heart, Bright's kidney, or what not. To loving eyes the veil of the future seems more transparent ; they take cognisance of the earlier change in the whole man, the interruption in the

circle of life, the *breach* in the chain of those vital processes whose continuity constitutes health. And hence it is not a bad term, when lay friends, no less philosophically than tersely, call the disease a break-up, or broken health.

I think it of great importance in the application of treatment to recognise as a definite disease this period of broken health which precedes the various degenerations above alluded to, and to see that, however much the final symptoms may differ, their origin, and the mode of curing them when curable, are similar. I will therefore describe it at some length, and beg your attention to identify the various phenomena named in one or other of the cases you may come across.

The approaches of the enemy are very insidious. The sufferer is unable to draw any clear picture of the symptoms; no one place is painful, and no one function of life absolutely abnormal; yet he feels himself less capable than formerly of transacting the ordinary work of life; the business-letter, that it was lately a pleasure to write, first loses its interest, and then becomes a burden; the little misfortunes of the pigs or of the turnips, the

worries of the kennel or of the parish, of the patients or the clients, become so intolerable that he gives up his very hobbies. Then he grows stiff and knocked up after the daily shorter constitutional ; going up-hill is especially fatiguing, though he does not suffer from shortness of breath.

The night's rest is almost always insufficient. The patient drops asleep on getting into bed out of utter weariness, but soon wakes up again, and is restless for the remainder of the time spent in bed. The ears buzz, and the back of the neck aches, and the bowels keep up a fidgety grumble, which leads to nothing more.

Then he feels uncomfortable after a moderate meal ; his meat oppresses him, and his wine flushes him. As time goes on, he finds he can take less and less alcohol with advantage to himself; he says he "feels to want it," but that it does not do him good as of yore.

Symptoms of defective circulation are seldom absent ; the knees and ankles are stiff and swelled of an evening ; and, as he stands about at his morning wash, he sees his feet flushed and con-

gested with stagnant blood. Mysterious pains in the back and side are felt after sitting down or riding for even short periods; often a dull discomfort at the back of the neck seems as if it were going to be a sick headache, but does not prove so.

The urine is usually pale; it irritates the bladder, especially in the forenoon, and causes frequent micturition. There is often flatulence after exertion of mind or body, and apparently independent of the quality of food taken.

Perhaps at first all this is attributed to what is called "derangement of stomach;" but observation of the action of the bowels shows not enough to account for the continued ill-health. The stools are, indeed, scanty and softer than natural; but they occur at the usual hours daily, and are rarely diarrhœic. The wind from the intestines, when flatulence is present, seldom has that fetor of sulphuretted hydrogen so characteristic of dyspeptic decomposition. That is to say it has not naturally; but if purgatives are taken, then the indigestion, which I have described as absent, is sometimes artificially induced.

Soon the complexion loses its transparency, and acquires a faded dingy or gray hue ; though, if there is any fixed colour in the skin, this becomes darker and more fixed. The nose looks blue and wintry, and wrinkles are brought out as the disease advances, giving an air of premature old age to the patient.

In spite of the loss of strength, he sometimes gets burly and heavy from the growth of soft fat in the cellular tissue ; and this increase of weight is a further distress by impeding the exercise of the bodily powers. The nails get friable and crack ; the hair is dry, and easily falls off ; sometimes it quickly turns gray, increasing the aged look before mentioned.

Sometimes the detection of an imperfection of one or other of the senses drives the puzzled invalid to look after his health. He grows deafish without there being visible cause in the ear to explain deafness ; and his aurist finds the usual local remedies fail. Or the sight becomes weak, especially towards evening ; and yet his ophthalmic surgeon can find nothing wrong in the eyes.

I have used hitherto the masculine pronoun in

speaking of the person affected ; but the symptoms are, *mutatis mutandis*, much the same in the female sex. The defective power of active exertion is less observed by women, because they are usually less called upon to make active exertion, and the idleness which tortures the mind of the husband is not infrequently the daily labour of the wife even in health. When the more busy-brained complain of not being able to go on as usual, they are assured by their friends that they are merely falling into a more properly feminine style of life, and so they come to mind less their deficiencies. Thus they have some advantage over the other sex ; but on the other hand, the symptoms are with them apt to advance rapidly, and the morbid changes to fix soon on some local viscus. The heart especially is in great danger of becoming dilated. The anaemia, too, is marked in females, partly because they are prone to it naturally, and partly because there is less fixed colour of exposure in their faces and hands. Instead of increasing in size, they are the rather apt to become thin and emaciated. Also the reproductive organs in them are early

noticed to be affected ; the monthly evacuations become scanty and irregular, though not painful, and many wives lose suddenly the inclination for and the power to bear their matrimonial privileges. These are the chief differences of the symptoms in women.

To the mind of the physiologist perhaps the most striking evidence of the defective vital power in both sexes is in the urine. I have said it is pale and scanty ; it is also of lower specific gravity than one would expect from its scantiness. Yet there is not that deposit of lithates which shows imperfect assimilation in a healthy person. Examined under the microscope, it exhibits not infrequently floating crystals of oxalate of lime, and I have heard the irritability of bladder attributed to the pricking of these sharp crystals. But they are really a great deal too small for that, and, besides, I have found great irritability when they were absent. No—the symptom seems rather due to the deficiency of the normal cause of acidity. For usually the pale urine of these patients is alkaline or neutral, either of which states is sufficient to cause the desire to evacuate

the bladder without any diseased state of the urinary organs.

The deficiency of urine is not supplemented by any increase in the secretion from the skin, as is the case in health. The perspirations are scanty and chilly, and appear to be mere transudations of water, instead of being impregnated with the sebaceous secretion as in robust persons.

What I have been endeavouring to depict is the incipient stage of the disease.

If the patient submits his case to the physician, the history seems obscure enough, and indeed consists mainly of negative symptoms. It is not so much that the functions go wrong, as that they do not go on sufficiently. Perhaps sometimes he is told he is "nervous," and an effort is made to quiz him into good health. I do not think this quizzing wise or kind. If judicious treatment be employed, I believe the condition to be perfectly amenable to art, and that recovery need not be despaired of if the means of attaining it be taken in good time. But in the majority of instances, unfortunately, this does not happen; attention to the general health

is postponed till the separate deficiency of some one organ excites alarm as well as discomfort, and enables the ailment to be classified under a more definite name.

This fixing of the disorder in some spot in such a degree as to lead to the diagnosis of the disorganization of that spot, I would designate as the second stage.

The failing part is usually one which has been overworked during the early period. If bodily exertion has been persisted in, spite the natural warning to abstain, the heart is very apt to become dilated. In quieter persons some of the arteries become opaque and thickened or dilated; there are throbings in the head, faintings, threatenings of apoplexy, or perhaps only weakness and irregularity of pulse. If one limb, or certain muscles of one limb, are alone overexerted, as in some peculiar bodily exertions or awkward postures, atrophic paralysis of these often occurs, accompanied by pain in the atrophying parts. This sometimes saves vital viscera by putting a stop to the hurtful employment.

Amongst our labouring classes Bright's disease

of the kidney is a very usual result. Next to dilated heart, it is with hospital patients the commonest local expression of a general degenerative dia-thesis; whereas in the upper ranks of society Bright's disease is, according to my experience, a primary lesion of the renal tissue, and much less frequently preceded by the injured state of constitution which we are now concerned with.

There are two causes to which it is possible to attribute this liability of the lower orders to have general degeneration fix itself in the renal organs: intemperance and exposure. Though both may have some influence, the last, according to the histories I have been able to collect, is by far the most powerful and the most common. *Cæteris paribus* sober persons seem to me quite as liable as drunkards, or even as spirit-drinkers. I attribute the lesion in these cases to the extra work thrown on the kidneys by the exposure of the skin to cold and damp, when those viscera are suffering a defective vitality along with the rest of the body. The resulting albuminuria is sometimes temporary; sometimes it is only induced by passing external circumstances, such as a catarrh,

an exposure to chill, an imprudence in eating or drinking, a mental emotion. It is very rare to find blood in the urine ; even casts of the tubes are not common ; and the quantity of albumen is invariably small. It is, in short, a slowly marching, little-marked form of the disease.

Chronic bronchitis not infrequently appears as the disease advances in persons past middle life. It seems due to the degenerative thickening of the mucous membrane of the air-tubes and to hardening of the bronchial cartilages.

Atrophic softening of the brain is another local expression of the condition I am describing. It is slow in its progress, often intermittent, less marked in its symptoms, and more likely to be recovered from than where it is a purely local disorder. When I speak of recovery, I do not mean to affirm that the softened parts resume their transmission of psychical influence—I have no proof that this is possible,—but that their place is taken by other portions of the brain, and the functions are performed in a normal manner.

Atrophy of the testicles and other forms of impotency in the male sex are rare. I do not know

whether it is by accident or not, but I have not happened to meet with these symptoms preceded by broken health, except in Europeans who have been exposed for long periods to tropical heat.

So far as I am aware, the deafness and weakness of sight, alluded to in the description of the incipient stage, do not get much worse, nor do they appear to lead to any serious disorganization of the organs affected in the second stage.

Among the effects of general degeneration I do not think we can include tuberculosis. Associated together they are sometimes—perhaps I might say, not infrequently; and the relief of pulmonary symptoms, when the degenerative progress is arrested, is so remarkable as to suggest that the latter is the *origo mali*. But anatomical experience tells another tale. It is rare to find tubercles in degenerated tissue; when tubercles and degeneration occur together in the same body, they are usually in different organs, and the tubercles appear of the oldest date. The clinical observation above mentioned must be explained on the supposition that the degeneration is a consequence and an aggravation of the con-

sumption, adding to its symptoms when present, and giving them relief when it is itself relieved. Though "consumption," as it appears to non-medical eyes, may be in great part a consequence of degeneration, yet tuberculosis is not so.

It would seem to be a rule that all local diseases commencing as general degeneration proceed less quickly to an incurable stage than when they begin locally at once. They are less fatal in themselves, and give much more encouragement to the medical man to hope for their arrest than when they start frankly in one organ. The patients must not therefore be condemned hastily; for if taught to manage themselves aright, they may live for years and years without becoming worse.

The great danger lies in the insidious latency of the symptoms, which often conceals from even a careful eye how far the disease has advanced, and beguiles us into an unjustifiably favorable diagnosis till it is too late for beneficial action.

I have thus described two stages of the disease which we may describe technically among ourselves as "general degeneration," and to the

public as "broken health,"—the first stage, or that of general diathesis, where cure may reasonably be aimed at; the second, or that of local development, where we can hope only to prevent the patient getting worse. There is also a third stage—or that where these local developments have brought their consequences of dropsy, ascites, increasing paralysis, consumption, &c.,—where you can hardly hope to stay the progress towards the grave, and can do no more than endeavour somewhat to retard it, and make it easier. It does not enter into the scheme of these pages to enlarge upon this last stage.

I have spoken first of the symptoms of the morbid state I am engaged upon, because about them we know most. But it is upon its essential pathology that I ground the suggestion I am about to contribute towards its cure, and it is necessary therefore that I should now come to my ideas on that subject.

The first cause which underlies the whole series of these pathological changes seems to me to be a weakness of blood-circulation—local in those instances where the disease is confined to one

part—general, where it is distributed through the body. Sometimes this weakness is induced—as, for example, by long-continued sedentary occupations, where the contractile fibres of the heart and arteries become sluggish from want of use ; or again, by anxiety of mind, where the nervous energy is withdrawn from the involuntary muscle ; or by exhausting debaucheries and laziness. Sometimes it is congenital ; sometimes it is hereditary,—in which case it is apt to be increased by over-exertion. But there are hardly any instances where you cannot trace a diathesis of weak circulation of blood ; and I think it will be by paying more and more attention to this point that we shall be enabled to rectify the morbid states in question. The greatest step towards rightly conducting a cure will be to find under what circumstances the circulation becomes more active, and under what circumstances a weak circulation is least injurious to the patient.

I do not hold that we ought, in view of pathological changes, to sit down like the Alpine herdsman, who watches day by day the march of the glacier over his little farm, hoping that it will

stop, and knowing that it often does stop, but powerless to control the event. I am sure we need not do so ; I am sure that a careful study of the conditions under which disease “ gets well of its own accord ” (as it is phrased) will enable us to imitate those conditions and to induce them when absent.

There is no more dangerous snare to the earnest open-hearted practitioner of the present day than the sceptical reading of “ Expectant medicine.” Many an ardent student, when he sees a patient get well without some, or mayhap without any, of the treatment detailed in his text-book or by his first teacher, is very apt to take refuge from his puzzled state in the conclusion that all treatment is useless. And I am afraid that in this he is too much encouraged by many a hasty hospital physician. But as patients not unreasonably insist upon having something done to them for their money, an unscrupulous or ignorant man fills up the gap with the traditional mixture of various remedies. Hereby you may know him, according to the indication given long ago by Lord Bacon, who says broadly that

“Polypharmacy” (as he calls it) is a sure proof of ignorance. And the ignorance is of the worst sort, voluntary and obstinate. No attempt is made to cure it by experience—no attempt *can* be made to render the case useful to individuals or to the profession, when a heap of medicines are given at once. Such practitioners not only refuse to enter in at the gate of knowledge themselves, but they tumble down and bar the way against others.

Permit me to return to myself for a minute. I was able to hail returning health, and yet had taken no medicine. I had tried fairly and exclusively the experiment of travelling in Italy, and I felt myself a different man. First the pulse beat evenly, then stronger and firmer; soon the heart-stroke could be felt with the hand. Then the muscles regained their power, and instead of prostration after exertion, there came a healthy feeling of weariness. The cold sweats after mental attention ceased gradually. The congestion and serous œdema of the lower limb were only occasionally perceptible. Alcoholic stimulants were less and less demanded, and the digestion pros-

pered better without them. Flatulence was no longer troublesome, and the motions were more copious and solid. I could apply my mind to whatever interested me without being punished by a sleepless night afterwards.

Was the change due to time only, or had the climate anything to do with it? It was an interesting question as regards myself, and an important question as regards many a patient, whose downward progress might perhaps be arrested in this way; and I assure you it gave me occasion for much thought at most uncongenial times and places, starting up amongst the gay walls and homely relics of Pompeii, the Doric solemnity of Sicilian temples, the noisy fun of Naples, or the triumphs of Florentine art, and leading me to bore with questions people of all classes likely to assist me with information. I wanted to put to the test of facts our vague notions; I wanted to know from collateral and indirect evidence what was the actual effect of the Italian climate in the production of disease, and what in the progress of disease when once produced. I was determined to bring back somewhat more than a mere collection of opinions.

The first fruit of my inquiries was this—that throughout both mainland, peninsula, and islands, what was talked about, thought about, dreaded and avoided, what had to be treated by the physician, and was generally the cause of death, was acute disease and not chronic. When directly questioned on this head, medical men concurred in observing that the greater part, and often allowed that almost the whole of their work was made up of acute cases. Some considered this the natural state of things, and seemed not aware that it could be otherwise ; but a few, and especially my friend Dr. Pantaleoni of Nice (late of Rome), had used travelling experience to remark this difference between their practice and that of brethren in England and Northern France. He told me that of Italian patients he had ninety-five acute to five chronic, and those latter chiefly hysterical and neuralgic ; whereas, as he justly said, in the case-books of London physicians the proportions might be inverted without being far wrong. Others fixed at a guess on four fifths, others on two thirds, as the proportion of acute cases in their native *clientela* ; but as their

minds had not specially been addressed to the subject, the numbers are very likely under the mark. The accomplished man whose name I have quoted had, on the contrary, thought much and deeply on the matter, and indeed it was by him that my attention was first turned to it.

Now this evidence is very important ; for I may appeal to the experience of every London physician as to the approximate truth of Dr. Pantaleoni's reckoning of the proportions of acute and chronic in our practice. An important difference is shown, and that proves either (1) that chronic diseases comparatively seldom originate in Italy, or (2) that they are so little troublesome that the afflicted do not go to physicians for them, or (3), that they both seldomer originate, and are also less painful, less injurious to the general health than in England or places of similar latitude. Now under any of these circumstances it would seem *prima facie* to be a climate suitable for their cure. And if it is a climate suitable to the cure of those forms of disease which constitute so large a proportion of our practice, have we not here a most potent engine to use which

aright implies a weighty responsibility? Is not any knowledge about it deeply important to us both as physiologists and as physicians?

PART II.

STATISTICAL EVIDENCE.

THE knowledge which I have described as gained will be felt probably by all to be rather suggestive than satisfactory. There is just enough consent of opinions to indicate the existence of a truth, but not enough to put it into a definite practical shape. Any one accustomed to the rigid demands of modern scientific investigation will not be satisfied without registered statistics to modify the suggestions of memorial experience ; and if he took the trouble to put his requirements into words, they would probably take some such form as the following questions :

First, whether registered facts confirm or not the idea of the minor gravity of chronic diseases in Italy as compared with England :

Secondly, whether they confirm also the idea of their minor prevalence :

Thirdly, whether there is any pathological condition to which this chronicity of disease can be referred :

Fourthly, whether the difference in the proportionate gravity and prevalence of acute and chronic disease in the two countries extends to all classes, or whether it is confined to the easy classes, of whom a private practice is made up. On the answer to this last question depends, of course, the probability of its being due to climate or to any social causes out of a stranger's reach.

As the first step in the solution I will compare the mortality of Genoa with that of London. These two capitals resemble one another in containing a large manufacturing, commercial, and seafaring population, a nearly similar proportion of poor and of persons in easy circumstances, in the hygienic conditions of drainage and water-supply (which are of average character, not so bad as Naples, though not so good as they ought to be), in a great influx of strangers of all classes, and in the active industry and general robustness of the people.

It may be remarked that Genoa contains

120,000, and London 2,804,000 inhabitants ; but the difference in population does not affect the propriety of the comparison, as both come equally under the category of great cities, and are liable to the same social causes of ill-health.

This latter fact is proved, as far as it is capable of statistical proof, by the returns of the mortality from zymotics. By the last annual return (1860) at Genoa, the class of smallpox measles and scarlatina ("dermatoses"), typhus and typhoid pertussis and croup together, caused 1 in 5·6 of the deaths ; by the last annual return in London (1862) 1 in 5·2. The difference is less than the accidental annual variation.

The authority I take for Genoa is a Register of the mortality for the year 1860, originally published in the '*Liguria Medica*,' by Dr. Giovanni Du Jardin ;* that for London the Registrar-General's Report for 1862 ;† each, I believe, the last printed records on the subject in their respective countries. Unfortunately, the nomenclature

* *Saggio Statistico della Mortalità di Genova nell' anno 1860.*
Tip. de' Sordo-Muti, Genova, 1864.

† Published in 1864.

and classification of causes of death are not the same in the two, so that it is impossible to make so accurate a comparison as could be wished ; and I have therefore thought it more conducive to a probability of true results to extract a few specimens of well-marked disease as examples, rather than to attempt to divide the whole into the two classes we want to compare.

I will take first specimens of chronic diseases.

Anasarca, or *General Dropsy*, caused in London 1 in 93, in Genoa 1 in 239 deaths.*

And with regard to this cause it may be remarked, that the real difference is probably much greater than would seem from the above numbers, for in England many deaths of anasarcaous persons are registered as from "*Nephria*" or from "*Kidney disease*," which items do not appear at all in the Genoese bills of mortality.

* I give the proportion of deaths by several diseases to the total deaths rather than their per-cent-age in the population, in order to make the table harmonious with one further on, where such a mode of reckoning only is possible. As the object is simply to show the proportion of acute and chronic disease, not the death-rate, it is sufficiently accurate.

The mortality by "*Kidney disease*" and "*Nephria*" in London was 780, in Genoa 0.

The *Chronic affections of the respiratory organs*, which in England are registered as "*Asthma*" and "*Bronchitis*," in London caused 1 in 10, in Genoa only 1 in 20 deaths.

Pulmonary Consumption is not included in the last item. It caused in London 1 death in 8, in Genoa only 1 in 13; and even that Dr. Du Jardin considers extraordinarily high for Italy.

As respects *Chronic affections of the nervous system*, I cannot find any cases recorded at Genoa of *Softening of the brain*. *Epilepsy* in London caused 1 in 180 deaths, in Genoa 1 in 253.

Among *Chronic affections of the organs of circulation*, *Aneurism* in London caused 103 deaths, in Genoa 0.

Chronic affections of the other organs of circulation (that is, practically speaking, *of the Heart*) caused in London 1 in 27 deaths, in Genoa 1 in 33.

Cancer caused in London 1 in 50 deaths, in Genoa 1 in 64.

You may remark that in all these (which are the names followed by the highest numbers in the

list of diseases capable of being considered as chronic), except the last two, the mortality proportioned to the total is in each case greatly on the side of London ; and, as a rule, the more decidedly chronic and degenerative the disease is, the more marked is the difference between the two cities. By the total of these chief chronic diseases it will be seen that the mortality is not far short of double that of Genoa.

But the difference is more than compensated when we come to examine acute and inflammatory affections.

*Enteritis, Gastritis, Diarrhoea, and Dysentery** together—that is to say, the most common *affections of the abdominal viscera*—caused in Genoa 1 in 8·9; in London but 1 in 30·3 deaths.

Acute affections of the respiratory organs caused in Genoa 1 in 9; while in London *Laryngitis, Pleurisy, and Pneumonia* (which is a fair rough representation of the Italian class) caused but 1 in 16.

Acute inflammations of the nervous centres, or

* I write down these together, because in a great number of cases, both in Italy and England, which of the four names is given depends on the taste and habits of the registrar.

Encephalitis, Meningitis, and Spinitis, caused in Genoa 1 death in 59; in London 1 in 119.

Apoplexy and Cerebral congestion caused in Genoa 1 death in 12, in London 1 in 40.

Acute inflammations of the heart caused at Genoa 1 death in 44; in London (where they are all classed as *Pericarditis*), only 1 in 606.

The total of these acute and inflammatory diseases shows in a striking manner their preponderance in the Italian city, their prevalence being considerably more than double that found in our metropolis.

It is quite true that the proportions of acute and chronic represented by these numbers are not so different as I have stated in my last lecture to be reported to me by Italian physicians from their memory. But it must be remembered that the diseases here reckoned, even with the zymotics, do not represent much above two-thirds of the whole mortality. Many classes must obviously include both acute and chronic; and even of acute ailments it is often the chronic effects which in the end destroy life, and of chronic ailments the acute developments which

are immediately mortal. In such an item, for example, as "*Convulsions*," which comprehends a very large section of the unclassified remainder in both registers, who can say which pathological condition is indicated? Again, Surgical Injuries may be fatal by acute lesions in one place, by chronic in another. Children who die *Teething* and the "*Esposti morti*"* have probably succumbed in London to one disease and in Genoa to another. I have no doubt that, if these classes could be analysed, the evidence of the bills of mortality concerning climatic peculiarities would add force to the argument I have already inferred from it. I have no doubt that the fatality of degenerative and chronic diseases is really even greater in England and less in Italy than these limited examples seem to show.

I subjoin a table which exhibits the above quoted facts in a more convenient form for ocular comparison.

* This is a singular class, to which there is no parallel in the English register. At Genoa, and at many other Italian cities, all illegitimate children are so much as a matter of course thrust into the turning-box at a foundling hospital, that Dr. Du

*Comparison of selected Causes of Death in
Italy and England.*

	LONDON.		GENOA.	
	No. of deaths.	Proportion to total deaths.	No. of deaths.	Proportion to total deaths.
Total from all causes	67,371	—	4,303	—
Typhus, typhoid, smallpox, measles, scarlatina, whooping-cough, and croup	12,915	1 in 5·2	779	1 in 5·6
Anasarca or general dropsy	718	1 in 93	18	1 in 239
Nephritis and kidney disease ...	780	—	0	—
"Asthma" and "bronchitis," or chronic affections of the respiratory organs, except consumption	6,552	1 in 10	215	1 in 20
Pulmonary consumption ...	7,871	1 in 8	318	1 in 13
Epilepsy	373	1 in 180	17	1 in 253
Aneurism	103	—	0	—
Chronic affections of heart ...	2,840	1 in 27	126	1 in 33
Cancer	1,335	1 in 50	67	1 in 64
Total of chief chronic diseases, as above	20,573	1 in 3·2	761	1 in 5·6
Acute affections of digestive viscera, or "enteritis," "gastritis," "diarrhoea," and "dysentery"	2,310	1 in 30·3	480	1 in 8·9
Acute affections of respiratory organs, or "laryngitis," "pleurisy," and "pneumonia" ...	4,021	1 in 16	450	1 in 9
"Cephalitis," "encephalitis," "meningitis," and "spinalitis"	566	1 in 119	72	1 in 59
Apoplexy and cerebral congestion	1,653	1 in 40	192	1 in 22
Acute inflammations of the organs of circulation, or "pericarditis"	111	1 in 606	97	1 in 44
Total of chief acute diseases, as above, not including zymotics	8,661	1 in 7·7	1,291	1 in 3·3

I will now compare not the fatality, but the frequency of occurrence, of these diseases, at least when sufficiently severe to induce people to seek the aid of a physician. There are very few records available for this purpose, and the best I have been able to find are those of the Ospitale Maggiore of Milan,* and those of St. Mary's Hospital in London.† The former are limited to the years 1858, '59, '60, but record the cases of 61,761 medical patients; the latter are spread over a period of nine years, ending with 1861, after which the register unfortunately ceased to be

Jardin divides all births into "Legittimi" and "Eposti." He conjectures that a few of the latter may be legitimate, put away by their parents because they are sickly or starving; but experience does not enable him to stretch his fancy so far as to suspect that any children born out of wedlock are ever kept by the mother. Of these "exposed" children, numbering 699 in the year, 336 were either taken out of the box dead or died within the current twelvemonth, so that the "*Eposti morti*" number nearly 1 in 12 of the deaths. The social bearing of the fact is obvious.

* Rendiconto della Beneficenza dell' Ospetale Maggiore, &c., del Direttore D. Andrea Verga. Milano. Tipografia di Manini. 1862.

† St. Mary's Hospital Annnal Reports from 1853 to 1861 inclusive. "Summary of Medical Cases."

made up for publication. It takes in 7319 medical patients. I will arrange them in as nearly as possible the same order as the last lists —namely, first the abdominal, then the pulmonary, then the cerebral organs, and then those of circulation. The nomenclature is somewhat different from that of the bills of mortality lately cited, but at the two hospitals it is sufficiently harmonious for the present purpose. And I may remark also that the degree of severity of the complaint in individual patients admitted is very similar, judging from the percentage of deaths under each item.

With *Bright's disease*, or dropsy with diseased kidneys, there were admitted at St. Mary's 232, or 1 patient in 31; at the Milan Hospital 22, or but 1 patient in 2807.

I fancied at first there must have been a mistake here, and that at Milan they had got entered under another heading. I looked about for "*Nefria*," or some such correlative term to that adopted by our Registrar-General. But it does not appear. "*Nefrite*," indeed, I find, but it is evidently restricted to real cases of inflammation

of the kidneys, as still smaller numbers are entered there than under "*Malattia di Bright*."

With *Anasarca without diseased kidneys*, dependent on diseased heart, chronic bronchitis, or on no known cause, there were at St. Mary's 74 patients, or 1 in 98; at Milan Hospital 776, or 1 in 78. Here there might be a suspicion that the headings are not correspondent in England and in Italy, that slighter cases might be included in one which were otherwise registered at the other hospital. This suspicion, however, is dissipated by the mortality, which is as nearly equal as possible, amounting at St. Mary's to 35·3, at Milan, to 33·8 per cent.

With *Ascites* there were admitted at St. Mary's 54, or 1 in 135; at Milan Hospital 625, or 1 in 98.

This would appear to depend on the greater prevalence in Lombardy of disease of the liver, to show which I have compared the number of cases of hepatitis in the two countries. And I have entered this item among the chronic diseases, simply for the convenience of bringing it next to Ascites, not because I believe it to be chronic.

It will be seen by the table (a few pages further on) that at Milan 464, or 1 in 133, were admitted with this morbid condition, at St. Mary's only 9, or 1 in 813.

With "*Chronic bronchitis*," or "*Bronchorrhœa*" at St. Mary's there were admitted 224, or 1 in 32; at Milan only 7, or 1 in 8823.

What these numbers show is not the absence to that entire extent in Italy of chronic bronchitis, but, at all events, the slight nature of the illness, which does not bring the patient to the hospital.

With *Pulmonary Consumption* there were admitted into St. Mary's 527, or 1 in 13; at Milan 1551, or 1 in 39.

Chronic diseases of the brain do not seem to be sufficiently numerous at Milan to constitute a separate class.

Aneurism of the aorta, again, is so rare there that it is hardly worth tabulating. There were but 4 cases, or 1 in 15,440; whereas at St. Mary's there were 29, or 1 in 252.

External aneurism seems to be nearly equally rare. There were at the enormous hospital at Milan only 6 cases, against the same number (6)

at our little St. Mary's. I do not make a more rigorous comparison because I have not tabulated the surgical cases.

With *Organic disease of the Heart* there were admitted at St. Mary's 260, or 1 in 25 ; at Milan 1717, or 1 in 35.

The total of the above-named chronic diseases admitted was at St. Mary's 1412, or 1 in 5 ; at Milan 4702, or 1 in 13. So that it is clear that in prevalence, still more than in fatality, chronic disease in London has far greater importance than it has at Genoa. The fatality was nearly double ; the prevalence is more than double.

In acute diseases the numbers are very different.

Enteritis, Gastritis, Diarrhoea, and Dysentery (which in this instance again I have thought best to add together, for the reasons before given) are represented at Milan Hospital by the number 7415, or 1 in 8 ; at St. Mary's by 90, or but 1 in 81 ;—*Pneumonia, and Pleurisy* at Milan by 4904, or 1 in 12 ; at St. Mary's by 330, or 1 in 22.

It is clear, therefore, that the old idea of avoiding inflammation by sending patients to

Italy is a very fallacious one; for the prevalence of inflammations of the lungs is, by the above numbers, nearly twice as great as it is in England.

The same may be observed of febrile *Bronchitis*, the line between which and pneumonia is very fine drawn. With febrile *Bronchitis*, including influenza and acute catarrh, there were admitted into Milan Hospital 5668, or 1 in 10; into St. Mary's 245, or 1 in 29.

With *Acute inflammations of the brain (Encephalitis, Meningitis)* there were at Milan Hospital 513, or 1 in 120; at St. Mary's not half so many—namely 29, or 1 in 252.

But the most remarkable difference appears in *Inflammations of the spinal cord*, of which disease, so rare with us, there were at Milan Hospital 475 cases, or 1 in 130; at St. Mary's there was only 1 in 7319. And a serious inflammation it is too; for of the 475 cases, 50 were fatal.

Apoplexy and sanguineous congestion I ranked at Genoa amongst the acute diseases, and found the mortality by it in that city nearly double of that in London. As an hospital disease, however, it does not appear to be so prevalent: at

Milan the numbers admitted were 230, or 1 in 268; at St. Mary's 90, or 1 in 81. In each instance the cases seem to have been of equal severity, half proving fatal—namely, at Milan 114; at St. Mary's 45. Though doubtless an acute disease, yet in so many instances the way for it is prepared by degenerative conditions, that I do not know if I have done right to put it in this class. However, as the only effect to make my argument slightly less strong, I have let it stand.

With *Pericarditis* and *Endocarditis* there were at Milan 316, or 1 in 195; at St. Mary's 119, or 1 in 53.

The prevalence of this acute inflammatory disorder at St. Mary's is explained by the large amount of *Rheumatic fever*, of which there were at St. Mary's 835 cases, or 1 in 8; whereas at Milan there were 3203 or only 1 in 19.

With *Erysipelas* there were at Milan 1000, or 1 in 61; at St. Mary's 69, or 1 in 106.

The proportion of deaths by zymotic diseases in Genoa and London was so nearly equal that I excluded them from the calculation as not

affecting the result. Here they are different, the numbers of *Typhus fevers* being at Milan 8226, or 1 in 7; at St. Mary's 471, or but 1 in 15. The comparison of small-pox, scarlatina, and measles I do not make, because practically they are not treated in the wards of general hospitals in London.

Taking now the totals of the acute diseases named above, it will be found that at Milan they amount to 31,950, or 1 in 1·9; at St. Mary's to 2293, or but 1 in 3·2.

I have no doubt that in looking over the appended table you will be able to make other deductions, but I feel sure they will all tell in confirmation rather than in abatement of the conclusions I have been led to.

Table of Comparison of Hospital Patients.

	AT OSPITALE MAGGIORE, MILAN, IN THREE YEARS.		AT ST. MARY'S HOSPITAL, LONDON IN NINE YEARS.	
	No. admitted.	Proportion to total.	No. admitted.	Proportion to total.
All medical diseases	61,761	—	7,319	—
Bright's disease, or general dropsey with diseased kidneys	22	1 in 2,807	232	1 in 31
Anasarca without diseased kidneys, dependent on diseased heart, chronic bronchitis, or no known cause	776	1 in 78	74	1 in 98
Ascites	625	1 in 98	54	1 in 135
Hepatitis	(464)	(1 in 133)	(9)	(1 in 813)
"Chronic bronchitis" or "bronchorrhea"	7	1 in 8,823	224	1 in 32
Pulmonary consumption	1,551	1 in 39	527	1 in 18
Chronic brain disease, softening, abscessa, &c.	0	—	12	—
Aneurism of aorta...	4	1 in 15,440	29	1 in 252
Organic disease of heart	1,717	1 in 35	260	1 in 25
Total of the above diseases, except hepatitis	4,702	1 in 13	1,412	1 in 5
Enteritis, gastritis, gastro-enteritis, diarrhoea, and dysentery	7,415	1 in 8	90	1 in 81
Pneumonia and pleurisy	4,904	1 in 12	330	1 in 22
Bronchitis (febrile)	5,668	1 in 10	245	1 in 29
Encephalitis, meningitis	513	1 in 120	29	1 in 252
Noteo-myelitis or inflammation of the spinal cord	475	1 in 130	1	1 in 7,319
Apoplexy and sanguineous congestion of brain	230	1 in 268	90	1 in 81
Pericarditis, endocarditis...	316	1 in 195	119*	1 in 53
Erysipelas	1,000	1 in 61	69	1 in 106
Rheumatic fever, acute and subacute rheumatism	3,203	1 in 19	835	1 in 8
Zymotic, continued fever—to wit typhus, typhoid, gastric, catarrhal, angiostemic and typho-puerperal...	8,226	1 in 7	471	1 in 15
Total of the above-named acute diseases	31,950	1 in 1·9	2,293	1 in 3·1

* In 6,415 patients in eight years; so one eighth of that number has been added to the totals.

This collection of numerical facts, imperfect as it is, confirms, defines, and explains the conjectures mentioned in my last lecture, as made by physicians in Italy, in respect of the comparative prevalence of acute and chronic disease in their practice. It shows :

First. That there is a remarkable excess in the mortality from chronic disease in London over that of an Italian town similarly circumstanced.

Secondly. That this excess in mortality is united to and probably arises from an excess in prevalence.

Thirdly. That the excess is most striking in diseases where a tendency to degeneration of tissue is the most marked, and the most directly the cause of disease.

I refer especially to *morbus Brightii* and aneurism ; but it is scarcely less observable in pathological changes of mucous membranes, which in England have a great tendency to pass into a chronic degenerative stage, and thus to destroy life. This is strikingly shown by the pulmonary mucous membrane. At St. Mary's Hospital,

though the cases returned as febrile bronchitis are scarce above one third of the proportion at Milan Hospital (1 in 29 against 1 in 10), yet the numbers of chronic bronchitis are extraordinarily disproportionate (1 in 32 against 1 in 8823).

Fourthly. The proportion of degenerative to other diseases is here exhibited in such as are wont to seek public aid in sickness, and is not confined to those in easy circumstances. It may therefore with reason be attributed to the climate or endemic habits of life, and not to any peculiarities of class.

It will be observed that these four propositions are answers to the questions which I mooted at page 29. Whether explicable by other physical phenomena of the country, or standing alone in solemn mystery, they are equally facts, which it behoves us seriously to reflect on and to turn, if possible, to useful purpose !

PART III.

POWERS OF THE AIR.

Do you know a design by David Scott called “The Procession of the Unknown Powers”? It was the last product of his poetical pencil.—Man sits naked on the bare earth in the act of rising, and looking up into vacancy with a painfully loving, longing gaze. His throat swells with emotion, his hair is dank with toil-drops, his arms are braced up to effort; the little wings sprouting from his active wrists flutter, but are ridiculously unequal to the task of raising him. Behind his back roll onwards in a vast orbit dim shadows of mighty king-like forms, bearing on their left palms transparent tongues of flame, their eyes looking only forwards, illumined and swelling with the reflected light from the one source of everlasting law and love. To praise and glorify that for ever their right hands are half-raised in adoration ; but

though so mighty their course is silent and still ;
no ray from their all-subduing flames falls on
man's intellect ; they pass by and leave him

*Irrequietum animi, et quærentem indagine vanâ
Naturam semper fugientem.*

I do not think anything, I am sure no words of mine, could more accurately describe the position of the physiologist, when he comes to reflect on the influence of climate on health. He perceives dimly by their shadows that almighty forces are in action, but what they are he can barely guess. He calls one Electricity (and he may just as well at once put a capital E to it), another Magnetism, another Ozone ; but he knows little more of their relation to his special subject of investigation. He hardly knows whether the phenomena he has observed arise from their excess or deficiency.

Therefore, now that I come to speak of the causes which originate the variations of disease and health in different climates, I shall avoid all but a cursory mention of the probably chief factors. As we know so little of these things, so much would be required to be said about them, that I am loth

to give up the time. I shall confine myself to the obvious and external peculiarities of life in Italy, without entering upon the question whether it is of such things, little in themselves, and weak in separate action, that the sum of the specific action of climate upon health is made up, or whether more subtle cosmic influences are at work.

§ 1. Take the map of Italy and follow its three thousand miles of coast line. How it winds and folds upon itself, as if every mountain was trying to wet its feet in the sea, and every plain was anxious to enfold at least one little baylet of salt water, and to be kissed by a breeze fresh from its dance with the waves !

Then gather from the now popular works on physical geography the characters of those waves and of their sister breezes. The supply of fresh water by rivers to the Mediterranean is very much less than that which is brought down by the Gulf stream from the Polar glaciers to the Atlantic. It is therefore salter, and would be salter still, and in course of years all salt, were not a vast stream of Atlantic water flowing in to Straits of Gibraltar. It is, consequently, more ready to remove mois-

ture from the air, and less ready to part with it to the air under varying temperatures than the ocean which surrounds us at home. Its temperature also is more equalised throughout ; there are not as with us, hot and cold streams, the vapours from which meet in the air and precipitate their watery burden on the earth. So that the atmosphere is, in the first place, clearer, or has a minor degree of hygrometric saturation than in the British Isles, and, in the second place, is less rainy.

Of course there is rain, and of course there is east wind and north wind in Italy as elsewhere ; but there is not that continuous depressing influence of the combination of a cold wind with a saturated air which we have. Then the avoidance of these black un-Italian days does not involve an imprisonment of a week or two in the house ; and, in travelling, a change of residence of a few miles will often put you completely under shelter. Those who go abroad with an old-fashioned guide-book, or take their ideas of Italy from the queer little pictures in blue body colour that used to adorn our nurseries, may be found grumbling, but those who have ever tried to travel in England,

and have the gift of comparison, will be well content. When they see the deep indigo horizon, the mark of extra saltiness in ocean, which so generally bounds the traveller's landscape in Mediterranean lands, they will bless it for the clear air of which it is not only the indication but the cause.

§ 2. The high temperature of this great body of water, so intimately intermingled with the land, preserves that of the air from the variations which we experience. This is of course most especially the case on the coast, but even inland it may be experienced, as is amply shown by the published tables. The only exception is that of spots in the immediate vicinity of snow-clothed mountains, the air blowing over which in the early spring is much chilled. So that in such places as Florence, for example, a change of wind from a sea breeze to a tramontana may cause a very sudden fall of the thermometer. But these are matters of comparison--the even temperature of Italy as a whole compared with England as a whole must be allowed; its exposed climates are less variable than our exposed climates, and its sheltered

nooks more completely even than our sheltered nooks.

§ 3. There is a higher amount and degree of sunlight than in our skies, so that all the chemical actions in the animal body must be intensified. A conspicuous evidence of this is the readiness with which the skin of the face becomes tanned even in the short and fresh winter days.

§ 4. The nervous system is much more awake to the effects of alcohol; so that instinctively less quantities are taken to produce the required effects. There are south of the Alps very few, if any, water drinkers; but there are also very few indeed who indulge in strong drink. One does not "feel to want it." A single glass of Orvieto or Capri there seems to produce as much exhilarating relief as an allowance of the domestic Port or Sherry containing five times the quantity of spirit.

Not only is it felt superfluous, but positive discomfort is felt as the immediate effect of what appears to a stranger moderate doses of alcohol. Watch one of the half-French Piedmontese *bersaglieri* recently arrived from his Alpine home

with his regiment at Naples. He takes his accustomed dram as naturally as a French Zouave; but he comes out of the shop looking grim and uncomfortable, his face flushed, his eyes dim and staring; and it is lucky if he does not commit some extravagance which sends him for a few days to the guard house, to ruminate on the different effects of alcohol in different climates. The pleasurable effects of drink are drowned in the rapidly accruing discomforts.

Thus is accounted for the rarity of the usual bad consequences of intemperance in Italian hospitals. In the list of medical diseases which I have tabulated from the reports of the Ospetale Maggiore at Milan, there are but 22 cases of delirium tremens, or 1 in 2807; whereas in the lists of St. Mary's Hospital, London, which I compared with it, there are 71 cases, or 1 in 103.

§ 5. An analogous observation may be made in respect of animal food. Less is felt to be required, and moreover a less rich or fat meat, than in Great Britain. New arrivals may often be seen exulting in the improved digestive powers which enable them to eat meat dishes at break-

fast, and to take toll from each passing delicacy at the table-d'hôte. But you will soon find them returning to tea and toast at the one, and restricting their performances at the other more to the vegetables and the maccaroni. Fortunate indeed it is that butter is not much wanted, for it is very seldom to be got of a sort fit for the consumption of those used to better.

§ 6. There is scarce a stranger in Italy but what complains at first of want of sleep. This often makes travellers quite full of anxiety about themselves: they know they suffer from want of sleep at home, and expect to suffer when it is deficient in Italy. They have sometimes recourse to opium, which makes matters worse, produces constipation, loss of appetite, sometimes even bilious attacks and jaundice. But if they leave matters alone, they find that the anticipated evil results do not follow; that the few hours of rest which they have is as good, for all practical purposes of refreshment, as the long unconsciousness to which they have been used, and which is really requisite at home. The fact is that the nervous system, being more alert and active, is better

able to get through its day's work, and less exhausted by it. So that sleep is less profound, and easier shaken off and dispelled by slight disturbances. This light and short repose is soon found to be the custom of the country, and the mind being set at rest is satisfied with it.

§ 7. There is no land where there is so much variety to divert the mind from preying on its own thoughts as Italy. It may be doubted whether the past, the present, or the future offers most here to attract the attention. If none of the strata of historical relics interest the traveller, he can still hardly help feeling their present picturesqueness, and the loveliness of the forms and colours by which they are surrounded ; while to the social or political observer the specimen of a naturally intellectual and industrious people, long restrained by untoward circumstances, and now at length bursting out for good and for evil into new life, is unique. He desires to live, were it only to see what becomes of them.

Now reflect how these various agencies may act on the human body. The dryness of air,

without excessive heat or cold, renders it unnecessary for the mucous membranes to put on their slimy coats of mucus. They are in a more active condition for the work of absorbing oxygen, digesting, extracting nutriment or water, or whatever else they are required to do. They are filled with blood, and pass it on rapidly with its fresh burden of renewed life to the tissues.

The evenness of temperature renders it possible for all, invalids included, to be a great deal in the open air.

The action of sunlight in reddening the blood is familiar to even the poets. The etiolated plant of northern climes is quickly by it rendered crisp and hardy, and the same effect may be inferred to take place in the etiolated animal.

Spite of all the arguments of philanthropists, alcohol will always remain an evil necessity to brain-working populations in Northern climes. I do not know but what its occasional use is a necessity in all climes. But certainly a little goes further in the South, and therefore less is requisite, if any. Thus is avoided the temptation to the slight daily excess, which is the most

powerful agent in the production of that degeneration of tissues so fatal to our invalids.*

By the taking less meat, and a less fat meat, is avoided the rancidity so familiar to us in slow digestions which renders the food innutritious, and which we have therefore to counteract by our remedies. I have heard it remarked that English physicians are always prescribing alkalies, whereas Italians find the great majority of their patients better for acids; and I think this may be explained by the acid fermentation of oily food which takes place in torpid stomachs in our country, and is less frequent under a southern diet. Now the renewal of the digestive powers implied in the removal of rancidity, cannot but be an important element in the supply of new material to the worn-out tissues, to replace the degenerated and degenerating.

You may perhaps say that many of those whom you would wish to send to Italy, and which seem proper cases, are already taking oil as a remedy—

* For the action of small quantities of alcohol, see the experiments detailed in my lecture “On Alcohol” in ‘Lectures, chiefly Clinical,’ page 563 (4th edition).

probably cod-liver oil—and that it is inconsistent to send them to a country where the meat is especially wanting in this constituent. That difficulty is easily got over by continuing to take the cod oil, which is much more wholesome and lighter of digestion than mammalian fats after their usual preparation in the kitchen. It is not at all rare to find persons who can take a good clear pale fish-oil, with whom bacon, cream, fat beef, and various other attempted dietetic substitutes for it obstinately disagree. Nay more, I have often had patients who had tried in vain to take cod-liver oil immediately after their meals, as had been recommended to them, and in whom the nausea, eructation, &c., ceased when they took the same identical dose at a time equi-distant from meals, in the mode I recommended to you in my Lecture on Consumption.*

The shortness and lightness of sleep must not invariably be looked on as an evil. It is rather an indication of the rapidity with which the nervous system refreshes itself after daily fatigues, an indication, that is to say, of unaccustomed

* 'Lectures, chiefly Clinical,' p. 275 (4th edition).

power and vitality. But I must allow that the functions of animal life become sooner used to it than the mental faculties, and if the latter are most exerted a weariness and exhaustion is experienced. As long as there is nothing to call for intense or concentrated thought, the want of sleep produces no inconvenience by day, and the health often, to the surprise of the traveller, feels the benefit of the increased vigour of nervous action. But no anxious business must be entered on till the stranger is acclimatised to his short nights, or the mind will be driven to require what it cannot get.

It is not alone on the passing traveller that Italy's special (I will not call it "*fatale*) dono di bellezza" acts. There is scarce a peasant but what is proud of the external aspect of his country,* and I am not at all sure that this feeling is not as powerful an assistant as any

* A genuine Italian will often prefer his country's praises to his own in whimsical ways. At Salerno we commended a soufflé to a waiter, who was the author of the delicacy: "Call that well made?" said he, "why every little lad in Salerno can make as good an one—Si, signori, ogni ragazz' di dieci anni nella città—and there are thirty thousand inhabitants!"

material agency in enabling him to live and flourish contentedly on what would starve or drive into melancholy madness an English convict or pauper. Do not set down this as sentimentalism or artistic whim. Consider how continually the converse of the experiment is impressed upon us by Blue-books and sanitary reporters, who are constantly repeating that a monotonous colourless life, such as finds its exaggerated type in solitary confinement, renders absolutely requisite an excessive quantity, and under other conditions unwholesomely stimulating quality, of food, to preserve in health the mind and body, although no complaint is made by the sufferer. Why then should it not be true that the daily life among picturesque and cheery scenes saves the victuals, although the benefited are ignorant of their blessings?

But it is indubitably for the stranger, as Filicaja complains in his touching sonnet, that this banquet of sweets is principally spread. The temporary resident profits more than the native by the fair scenes and their associations, by their ennobling and rousing effect on the mind, and

through the mind on the body. They have for him the additional charm of variety and novelty.

By thus tracking effects to their possible causes, we get a considerable confirmation of the statistical evidence as to the value of the climate. We can allow ourselves to hope from it increased activity in the repair of tissues, increased activity of circulation to supply the material of repair, and of nervous energy to regulate the whole. We may hope from it, in short, a **RENEWAL OF LIFE**, the converse and cure of that half-death which was described in an early part of the volume as the origin of so much disease.

It may be observed, especially by those acquainted with the country, that the places from whence I have taken my statistics are not those where the characteristics of a Mediterranean climate are most exhibited. They are physically less Italian than most parts of Italy. An invalid who had come so far in search of change of air would certainly never be advised to spend much time at Milan or Genoa. But I had no choice ; these two were, so far as I could ascertain, the only towns among those I visited where hospital

and municipal records of disease are kept; and if I wanted a statistical argument at all to steady the floating impressions which I had gained from rough observation, I must put up with them or none.

And now that we find not only that they confirm individual opinion, but that their results are to be explained by the obvious and universal physical peculiarities of the country, we can apply our knowledge of those peculiarities to a comparative estimate of the value of different places. If Genoa and Milan are better than England for a certain class of invalids, on the score of atmospheric phenomena which are less displayed in those towns than in other parts, how much better still will those other parts be?

The clearness and even warmth of the air which I have conjecturally ascribed to the great inland sea are found to greatest advantage along the west coast from Ventimiglia to Reggio. The shores and islands here enjoy all the warm breezes, and are screened in winter by the Alps and Apennines from the icy blasts which traverse the northern and eastern plains of Europe. The spring arrives

earlier, and the summer is more shady and less Sirocco-ridden than on the Adriatic. In the more northerly part of this coast it is the shelter from the cold and exposure to the warm winds and sun which causes the mildness of climate in winter, rather than the latitude. For it may be observed that Marseilles, which is more to the South than some parts of it, but lacks the protection, suffers much from frost in winter, and from dry heat in summer. But the southerly parts of Calabria and the important island of Sicily approach much nearer to a tropical zone by their geographical position; in fact, they are just so placed as to unite all the natural advantages for our invalids which a tropical climate possesses with those of a temperate climate. And, excepting for a few weeks occasionally in summer, there are none of the counterbalancing evils.

These natural advantages are in some places outweighed by accidental circumstances, and sometimes by man's mismanagement. Thus at Genoa there are in the amphitheatre of hills some high snowy gaps, which let in icy blasts right down upon the town in winter, while the high

houses shut out all sun from the narrow streets. Florence is open to the same objection, from standing high up in Val d'Arno in a sort of gully, towards which the winds from the hills converge, and the majority of its streets are like Hanway Passages bordered with Newgate Prisons. A great inconvenience also to invalids are the frequent floods of the river, caused by the emptying (for the purpose of gaining land) of the highland lakes which acted as regulating reservoirs, and whose removal makes the Arno practically into a gigantic mountain torrent. Naples again sits in a pool of her own excrements, opening towards the east, and exposed to the cold winds blowing from that quarter over the snowy Apennines, which are just far enough off not to shelter the town. The marshes from Civita Vecchia to Capo Miseno render their neighbourhood uninhabitable by all but those whom stern necessity forces to cultivate the soil; and again from near Salerno downwards the same cause drives away the traveller. It has not been always so—at Baiæ, now occupied by a few fever-stricken peasants, the approach to the land in a

boat is cumbered by the foundations of the villas of the ancient Romau aristocracy ; and the well-known temples at Pæstum, standing alone in solitary grandeur like three megatheria which had survived the chaos, testify to the old wealth and health of the population whose bones have rotted in the deadly swamps. At Rome also the malaria is mastering man's endeavours to live cheaply in his forefathers' habitations without the trouble his forefathers took to make them habitable. It is year by year more unhealthy. Yet even here you will find people resorting for health, and gaining it too, though under disadvantages they would not have elsewhere in Italy.

But I must not continue quoting examples, or I should have to go through the geography of the kingdom. It will be better to make a separate subject of the practical applications of what I have put together, and more conducive to a useful result to say what places I recommend than to enumerate those which are objectionable.

PART IV.

PRACTICAL APPLICATIONS.

THE principal reasons which I have given for thinking highly of the effects of a Trans-alpine climate in renewing to more vigorous life certain morbid states of constitution, do not apply to one season more than another. The causes to which I have ascribed those effects are more or less in action all the year round. So that I should have no hesitation in recommending a permanent residence as the most complete cure for the degenerative diathesis, by which I mean the most sure way of preventing a recurrence of the evils it entails.

You may say, indeed, that Italy is a more unhealthy country than England—that its rate of mortality is much higher. True; but that high rate of mortality is caused by diseases which are fatal to opposite states of the constitution from that under which our patient labours—diseases to

which active circulations, arterialized bloods, and easily lacerated capillaries are most liable. It is scarcely probable that such a complete change of constitution should take place as would lay your patient open to this source of danger without fair warning. Any such thorough revolution of diathesis will take place so slowly as to give him plenty of time to return leisurely to his own fireside a new man, able to enjoy it in safety.

But while I look upon permanent residence as the most complete and the most sure way, experience shows that the cases are few which need such thorough exile. I feel satisfied that in nearly all instances a temporary residence will do all that can be done by art. Happy so in good deed; for what greater trial can there be for a man, and the greater the more thoroughly human and manly he is, than to be debarred from ever being more than an occasional visitor in the home of his fathers? From the pleasure we feel on leaving England for a holiday we sometimes think we should not mind leaving it for good; and while enjoying the exhilarating sensation of strange scenes we are apt to wish to pass our life among

them. *Expert o crede*, holidays are no holidays after a few short weeks, or at most months, are over; and earthly happiness is to be found only in steady, regular work. There cannot be a more drear purgatory than the purposeless existence led by some of our countrymen resident without fixed occupation in foreign parts; either tiring themselves out by flitting with foolish perseverance in search of amusement which has ceased to amuse, or gaping with open shells in a vain hope that the tide of events may wash some food into their minds. One almost pardons them their scandal-mongering, and even still worse modes of excitement, when it is remembered that this is all that distinguishes their lives from those of the butterfly or the oyster. I shrink from exposing any one to this trial except as a matter of stern necessity; and after what I have seen abroad it must be a stern necessity indeed which makes me counsel a patient to throw up for ever home duties and live and die in a strange land.

Still in some cases it must be done; and in those cases of degeneration to which a permanent residence is suited the climate is beneficial all the

year round. It is not needful, nor indeed desirable, for the patient to migrate in summer to Northern Europe. The cases I allude to are—torpid phthisis with degeneration of the pulmonary tissue, emphysema of the lungs, and Bright's disease of the kidney.

For an invalid's fixed home I cannot imagine a spot more perfect than the Gulf of Spezia. A villa with grounds sloping to the shore may be easily found for him, and with equal ease may be furnished with home comforts either by sea from England or by rail from Florenee. There are few days in the year when he cannot enjoy in his garden or terrace the breeze softened by an almost tideless sea. A very slight improvement in strength will enable him to be wafted along the shore past the busy little land-locked bays and slumbering islets, the picturesque villages bosomed high in orange and olive groves, and merry with an amphibious brown-skinned swarm, broken rocks crowned with stone-pines and mediæval castles, or spots of more modern interests, illustrated by the quaint remarks of the boatman, all backed by the ever-varied snowy or dark ridge of

the Apennines. Very soon he will enjoy drives along very fair macadamized roads shaded by trellised vines, and with daily new scenery. But I must not weary you with these reminiscences, and will merely say further that the temperature is more even and the air more transparent than in any other part of the kingdom ; and the mountain-chains, the ornaments of the horizon, keep off and break the clouds and storms which afflict the interior. Nor need the mind be neglected while the body thrives. In places frequented by a Somerville and a Lever the intellect need not stagnate ; and, when weather and health permit, the nearness of Pisa and Florence by rail offer every advantage.

It is necessary, however, to remark that the town of Spezia is not so desirable for residence as the neighbourhood. Ten thousand inhabitants are crowded into rather a narrow space, and the drainage is of a primitive sort ; while the new works for the harbour and arsenal, upon which the Government is engaged, increase the crowding and limit the accommodation. Unless a country villa can be secured, I do not commend the

locality, and should advise a trial of Sestri, Chiavari, some of the spots on the other side of Genoa, such as St. Remo or Bordighera, or an island, such as Ischia or Corsica. But wherever the patient goes, he must take care that there are good carriageable roads in various directions, and not mere scrambling mule tracks, as is often the case in otherwise desirable places.

Where a temporary exile is sufficient—that is to say, in those curable cases I described as the first stage of general degeneration, and in a good many slighter examples of the second stage,—a selection of season may be profitably made. The climate is good for them all the year round; but they are able to take advantage of it one time better than another. And, moreover, the climate they are leaving is worse for them at one time than another. Some individuals are benefited by remaining in one place; but more forms of disease require a frequent removal to receive the full profit to be derived from change of air.

I will set in order, under the heading of the several seasons, the classes of patients to whom an Italian atmosphere is curative, dividing them into

those who seem to do best by a fixed residence, and those who are most benefited by travelling about.

In winter (that is, December, January, and February), cases of chronic bronorrhœa, languid phthisis pulmonalis with copious expectoration, and albuminuria without dropsy, should be housed in a sheltered spot with fresh morning and evening sea breezes. Such a cheerful nook is Nervi, on the Riviera di Levante, within a short drive of Genoa; but very different in point of climate from that temple of the winds. The orange gardens sloping down to the sea from the back of its comfortable, and not expensive, boarding-houses attract at first sight, and offer an inimitable lounge even at Christmas. Palms and stone-pines are evidences of the mildness of the air; but, perhaps, the surest are lemon-trees, which are imperilled by a second night's frost, and would not be grown as an article of commerce where there was danger of such an occurrence. The nearness of Nervi to the provincial capital renders it superior to Bordighera, St. Remo, the Sestri, Chiavari, and other places to the west and east;

for it certainly is of importance to a sick person to be able to obtain in an hour or two home comforts, English medicines, English medical advice, or such a change of food as a whimsical appetite may suggest.

Equal, if not superior in climate, and certainly superior in accommodation, though perhaps rather more expensive, is Palermo. It is accessible now by a direct mail boat from Marseilles, and is thus within four days' post of London. To those who take their families with them it offers peculiar advantages: an ample supply of water and good drainage, good roads, a pleasant resident English colony, numerous objects of interest to the lovers of antiquities and architecture, infinite "bits" for the artist, with a colouring that will warm his brain up for the rest of his life, and good shops for the "materfamilias." The decisive measures being taken when I was in Sicily effectually checked, and I trust by this time have quite put a stop to, brigandage, so far as travellers are concerned. The secret bands are broken up, and those who remain confine themselves to the safer proceeding of extracting black-mail from

their own countrymen ; so that strangers need not avoid the country on that score. Such of the party as are well enough can make excursions by sea to Messina, Taormina, Catania, Syracuse, Girgenti, Trapani, or take a smooth night's run to Reggio or to Naples. But to the latter place I had rather my patient did not go till the warm weather is established, as there can hardly be a more treacherous place than Naples for the delicate, should a mistral wind set in during winter or early spring. Altogether a pleasanter place than this clean cheery island-capital for a winter home can scarce be imagined.

Cases of languid tuberculosis without much expectoration, of weak heart and arteries, of relaxation of the vocal cords and allied conditions of the larynx, are benefited, even in winter, by moving about from place to place more than by stopping still all the time. Sheltered tours for them may be found along the Riviere to the west and east of Genoa ; and stopping a week or ten days at each halt will give a succession of changing scenery before each palls on the mind. The frequent migration is especially important if there is

hypochondriasis or atonic dyspepsia joined to the other symptoms. The same tour under the same conditions is well fitted for cases of chronic gout, and of sciatica, where a morbid change in the nerve or its envelopes is indicated by pain on pressure.

Where a weak circulation is partly exhibited in neuralgic symptoms, such as constitutional headaches, sciatica intermittent or painless on pressure, functional tic dououreux, or the like, without there being any affection of the mucous membranes, there is not the same need of shelter and high temperature. Then a more interesting tour to Milan, Florence, Venice, Bologna, Naples and its charming coast as far as Salerno may be made. The places especially to be avoided by the neuralgic, hypochondriac, and hysterical, by all, in short, when the vitality of the nervous system fails, are low-lying, moist, relaxing places inland, such as Rome and Pisa. With the exception of a few localities of this character, the whole of the peninsula is open to them.

Spring is the time to enjoy the genuine charms of Ausonia. March, April, and May, when they

visit her, appear really as they are sung by poets and allegorized by painters, fanned by the wings of life-giving zephyrs and rollicking in flowers. They would not know their dreary namesakes in England. As soon as ever the weather gets settled, which is at different times in different years, I would strongly recommend patients to move about a little in search of an enlivening change. Short sea-voyages, especially in a yacht of their own, from place to place along the coast, are then most useful. The invalid who has been at Palermo for the winter may then make his voyage round the island ; and if he is not interested by it, he must be a very flabby-minded person. I should, however, advise his not penetrating into the interior. The journeys on horseback are too long, the accommodations are infamous, and worst of all, there is little to repay you for the trouble. In April Naples becomes safe, and what can be more exhilarating than sauntering drives in that month through its merry suburbs, now laughing at the humours of noisy Santa Lucia, now looking down from the gardens and villas of Posilippo or Vomero over the acknowledged queen of all land-

scape scenery? No wonder that the pulse beats quicker and stronger; that the heart which was erst only to be discovered by auscultation, can now be found with the hand; and that the worn-out nervous system feels as it did at twenty-five.

I know of no restrictions or limitations necessary to mention as to the advantages of Italy in the spring, except those general cautions to travellers which I will give before I conclude.

In summer, the following morbid states are capable of restoration quicker in Italy than at home:—*Scrofula*, when the pulse is slow and feeble, the skin greasy, and the tubercular matter deposited in glands. The sea-bathing without subsequent chill, which is so useful in these cases, may be found in perfection in the Mediterranean. *Chronic rheumatisms* and *chronic gouts* may lay in a store of health sufficient to last them for some months, or perhaps years, but they must not expect to be quite cured. From all I can hear, a second summer in Italy does not do them equal good with the first, and sometimes is pernicious. *Dyspepsia*, especially if it is of the atonic kind, is benefited by the summer diet of a south European

population. One does not require, and has no temptation to, the kinds of food which aggravate the symptoms ; and moreover, the increased force of the circulation quickens the digestion, and makes a small quantity of food go farther. *Eczema* in elderly persons, *old painful wounds* and *necrosed bones*, and I dare say many others might be added, provided always that they are cases in which the circulation is weak and imperfect, and the functions of life generally are sluggishly performed.

The best places to go to in summer are, the islands of Ischia and Capri, Sorrento on the sea-cliff, Cava amongst the chestnut woods inland, if the patient is down in the south ; or if he is in central Italy, when he finds himself overtaken by too warm weather, he may go the Bagui di Lucea, not so much on account of the baths as on account of the air and the shade. I do not advise rapid travelling about at this season except by sea.

In Autumn, that is, in September, October, and November, it is mostly cases of exhausted nervous energy, or what Dr. Marshall Hall used to call “brain-fag,” which are restored to health. In

these cases what is required is rather change of scene than change of air. The mind should be relieved of its intrusive tenants, Worry and Anxiety, not by remaining empty—for such brains abhor a vacuum—but by a succession of new ideas. In Italy, after the summer heats have passed away travelling is healthy and agreeable. Then is the time to visit the infinite variety of interesting objects in the towns of the northern and central parts of the kingdom. Southern Italy is safest for the traveller in October and November; for September is rather a bad time for malaria and fever. So that if the patient is in South Italy in that month, he had better confine himself till its close to the regions I have mentioned under the head of “Summer,” or else travel northwards, to Venice for example, or to the lakes of Lombardy, which are delightful at that season.

I do not think it wise for those whom I have advised to pass a winter in Italy to get there before the end of November. The autumn affords them no advantages, and if they leave England sooner than I could wish, I recommend their spending the time in passing slowly through the

middle and south of France, where the weather will be found still bright and cheery, and where there is much to interest those of the party who are strong enough to enjoy it.

It will be seen on reflection, that the common link uniting all the cases which I have enumerated as likely to profit by seeking an Italian climate, is a weakness of circulation, and a consequent tendency to chronic and degenerative changes. I believe it is this which is curable and cured in them, and not anything special in the several pathological changes by which their ailments are named. Thus is explained what has hitherto appeared mysterious and inconsistent in medical experience; one case has received benefit, and another called by the same name has received only injury from a residence in the same spot, or from travelling over the same ground. It is easy, for example, by inquiry to find instances of pulmonary tubercle in the first, second, or even third stage, which have decidedly improved during a residence in Italy, and equally easy to find the same number of corresponding cases which have died, or got worse quicker than they probably

would have done at home. The difference between them will be found to lie in the diathesis which I have mentioned.

It will be well understood from what has gone before, that I consider some morbid states of body as likely to be aggravated by that climate which is so beneficial to others. All those to whom excitement of the circulation is injurious should flee the country. Persons of *apoplectic habit* run great risks there, as may be seen by comparing the comparative number of deaths from that cause at Genoa with those in London in the table at page 37; where it will seem that the proportion is nearly double. Those also who have a tendency to *congestive inflammations*; such, for example, as cases of sharply-beating hearts with imperfect valves, who are apt to have puerperal pneumonia quickly supervene. Harm also is done to early cases of *tubercular consumption* with a quick, excitable circulation, and a liability to haemorrhage; whether that haemorrhage appear externally as haemoptysis, or is extravasated in the pulmonary tissue. *Piles* also and *menorrhagia* are made worse, and sometimes brought on, by travelling

in Italy, in spite of precautions. All such cases, therefore, should be warned off, and indeed often are warned off by the honest medical advisers resident in the country.

It would appear, from the extraordinary number recorded in the Rendiconto of the Milan Hospital of inflammations of the brain and spinal cord, that the nerve-tissue is very liable to suffer acute organic change there. I have not been in the way of confirming this by personal observation, but I have noticed that, certainly, functional diseases of the nervous system are often intensified, and sometimes brought on in previously healthy parties. And notably *hysteria*. Hysterical women should never be sent on tour to these climes without great caution, or a travelling medical man with them.

I will now fulfil my promise of giving a few hints necessary in order to ensure a good use being made of the change of climate as a remedy ; and I will arrange them in the order which I adopted when enumerating the more obvious peculiarities of the conditions of life in Italy likely to act curatively on the invalid.*

* Page 51.

1. Let a patient not forget that he goes abroad for the powers of the air. The great object to be gained by a winter traveller is the license of being out of doors at a season when he would have been imprisoned in the house if at home. Let him take full advantage of this liberty and not neglect daily gentle exercise. And let the spring and summer traveller be as much in open carriages and boats as he can.

2. He leaves England to shun the depressing influence of damp joined to low temperature. Let him not expose himself to these abroad. He must be cautioned in winter against the cold frowse of unfrequented churches, usually the most interesting to the antiquary ; the bleakness of picture-galleries, whence a ray of sun-light is excluded as an enemy ; and, as a rule, all show-houses. It is hardly necessary to speak of catacombs, as they are dangerous even to the healthy. The night dews are always to be avoided ; in malarious districts even a single exposure may induce ague. I suspect their mode of acting is as a sudden chill on the body long exposed to the heat of the sun ; for even in the healthiest spots

they have a great tendency to give one a sore throat of a peculiar temporary character, such as I have never experienced in England.

3. Sunlight is of great importance to the invalid. This is a matter which should never be forgotten in the choice of a house for winter residence. Italian architects in general think much more of shutting out Phœbus when he is too fierce than of letting him in when he is wanted as a healer. The consequence is that the most fashionable localities and the most elegantly furnished apartments are by no means those which have the aspect best suited to our sanitary purposes. Look first outside at the rooms for a patient's use, choose them first by their windows, and then set to work to make the inside complete. Even in summer *sunlight* is of value, though *sunshine* in the middle of the day is too powerful. I have always observed that those travellers spoke the most favorably of the climate who had got the most browned by it. By defending the skull with a pugrah or a folded white handkerchief tied round the hat, the fear of sunstroke may be

avoided. And, artist or no artist, it is as well to have a brown holland umbrella.

4. That intensity of the vital processes which all go to seek as a remedy, is exhibited in disease by an acuteness astonishing to us foggy islanders. This must be remembered by all who are called upon to go as travelling physicians in Mediterranean climes. People get well quicker, it is true, but they also get ill quicker of their intercurrent or accidental complaints, and pass through their stages quicker than in England. This is especially true in respect of the congestive inflammations of fever, of pericarditis in rheumatism, and of pneumonia in diseased heart. Italy is not a place where you can indulge in procrastination of appropriate treatment; *la médecine expectante* is sadly out of place.

5. The invalids whom I should advise being sent to Italy are such as usually are injuriously affected by the chronic action of alcohol. Their vital processes are already too torpid, and alcohol still further retards them. But in England they cannot do without it, to stay mental depression and the wear and tear of the nervous system. In

those sunny lands their minds are cheered by the pleasant sauntering life, and their nervous systems are not worn or torn ; and so they do not want it. Let them exchange the furnace-heat of British port and sherry for a glass of those bottled sunbeams which call the white grapes of Orvieto, Monte Pulciano, Capri, or Asti their parent. If these disagree with the stomach, as is sometimes the case, let them take it as a hint to worship the *nymphæ*, or more properly speaking the *lymphæ loci*.

6. I think it a prudent general rule to imitate the natives of a country in their diet as far as possible. And therefore it is advisable to obey the instinct which in Italy soon leads one to take less animal food than we Britons have been accustomed to. And I think also medical men may wisely take a hint from the observation I made respecting the practice of their Italian brethren. Acids are more often required in medicine than alkalies in Italy. Thus, a summer diarrhœa, which is rebellious against chalk mixture and opium, yields immediately to lemon juice. In England lemons would have brought it on and chalk stopped it.

I believe too, it is in great measure from taking too much animal food that our countrymen so often suffer from bleeding piles in Southern Europe, and that if they would take less, this inconvenience might be often avoided, or at least considerably alleviated. Where the dietary is excessive, the haemorrhoidal discharge acts as a sort of safety valve, and should not be forcibly arrested by local means.

7. The knowledge that the deficiency of sleep is normal ought to prevent a rational traveller having recourse unnecessarily to opiates. But I am sorry to say people are very stupid on this point, and I have heard them almost boasting that they never could sleep without some pet preparation of a narcotic nature, and that they were obliged to persist in it, though it gave them a racking headache next day. Why—this headache is the proof that the artificial sleep was unnatural and harmful. It was the sleep that gave it them, not the abused drug. Many persons who are wakeful at night can often take an hour's siesta in the afternoon with advantage. If even they do not sleep, the repose is good for them.

They must not fancy that it will spoil their nocturnal rest ; on the contrary, that is often the sounder, while it lasts, from the body not being too tired.

The beds in Italy are generally very good. The elegant iron and brass frame-work manufactured at Genoa is the neatest and cleanest bedstead that can be devised. The bolsters and mattresses are very light and moveable, and even in Capuchin convents are usually shaken out of window daily. But, alas ! all this care does not exclude fleas. Wherever man is, be it in a hovel on a desert mountain inhabited perhaps once a month, be it in an excavation at Pompeii, or in a Greek theatre where no one has sat for more than two thousand years, there is his agile tyrant. So that it is not to be expected that the bedrooms should be free. I say this in mere justice to try and save Maritornes an unmerited scolding, when the unhardened traveller has found himself present at a nocturnal feast, “ not where he eats, but where he is eaten.” He had better console himself with the popular Italian dictum that such punctures are wholesome in moderation. If he

cannot attain to such philosophy, authorities recommend his taking a calico sleeping-bag to a country inn. So far, so good—but before he starts, let him try one night in it to see that it is long and wide enough. If too small, repose there is as difficult as in a Venetian dungeon (*probatum est*) ; and the materials for a new one are unattainable in provincial shops.

While on the subject of sleeping accommodation, I would remark that, except in very favoured localities, the window must not be left open at night. Sunrise is as dangerous a time as sunset in Italy, and even the robust suffer from it.

Where there is any fear of malaria, get, if possible, a room with a fire-place in it, and have a fire lighted immediately on your arrival. You can let it out if you like when you go to bed. In Sicily, unfortunately there are no fire-places except at Ragusa's Hotel, but then there are no malarious districts that you can ever want to pass through.

8. Inasmuch as a certain portion of the advantage of going abroad is due to the interesting succession of novelties offered to the mind, do not

imprison your patients too much in one spot. I have already mentioned several cases of even organic change, which are benefited by moving about, but I by no means wish to restrict it to them. I was quoting my own experience only, and I am quite sure there are many others capable of receiving profit from change of scene. Perhaps the best way to put the rule is to say that if patients can travel about without harm, it is sure to do them good.

At the same time, I would strongly blame the precipitate hurrying over the greatest quantity of ground in the smallest quantity of weeks, which so often makes our countrymen ridiculous. This is an imprisonment of a still duller kind—namely in a travelling carriage (often a close one) or a railway car. Stop in each place till its novelties cease to strike, and then leave it for another. Let the guide-book be used as a curb, rather than as a spur, to restrain impatience by telling you how much there is to interest in the place where you are, than what attractions there are ahead.

It is also not unworthy of consideration that these sauntering, sketching, vetturino journeys

usually furnish the most agreeable and most improving recollections of the healthy members of the party. The studies of red-skinned fishermen, mediæval farms, and fantastic olive-trunks call up in after years scraps of knowledge and feeling worth all the art-galleries in the world.

Before I conclude, I hope my professional brethren will excuse my adding a few words of warning against sending to Italy unsuitable cases. I have already mentioned several classes of patients as likely to be injured,* and I would add to that list such as, though appropriate as regards the pathological nature of their complaint, yet are too far advanced for you to expect conscientiously that they will return home alive. I refer especially to cases of rapidly increasing vomicæ in the lungs. A death-bed abroad is more painful and even quicker than at home. Avoid, also, sending patients who would be more benefited elsewhere. Such as those affected with irritative phthisis, who suffer much with cough in dry weather, and to whom a sedative, soft air is beneficial. To these the warm and moist Atlantic

* Page 84.

breezes at Madeira and the Azores, or even Torquay in some seasons, are so much more suited, that, though Italy is better than no change, you do harm in sending them there by preventing their adopting quite the best course.

Also—do not send people across the Alps who cannot afford to spend upon comforts and luxuries somewhat more than they are in the habit of spending at home. It is not the place for a poor man, unless he is strong enough to rough it ; and the misery of invalids who have to forego habitual indulgences in order to make both ends meet is very great, and quite outweighs the advantages of climate. This only chance is to get some appointment abroad, which will give them an income as well as a home.

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